IN THE SPECIFICATION

In paragraph 16, please change "transducers" to "an array of transducer elements," "probe" to "transducer," and "transducers" to "transducer elements" as follows:

[0016] FIG. 1 illustrates a block diagram of an ultrasound system 100 formed in accordance with an embodiment of the present invention. The ultrasound system 100 includes a transmitter 102 which drives ~~transducers~~ an array of transducer elements 104 within a ~~probe~~ transducer 106 to emit pulsed ultrasonic signals into a body. A variety of geometries may be used. The ultrasonic signals are back-scattered from structures in the body, like blood cells or muscular tissue, to produce echoes which return to the ~~transducers~~ transducer elements 104. The echoes are received by a receiver 108. The received echoes are passed through a beamformer 110, which performs beamforming and outputs an RF signal. The RF signal then passes through an RF processor 112. Alternatively, the RF processor 112 may include a complex demodulator (not shown) that demodulates the RF signal to form IQ data pairs representative of the echo signals. The RF or IQ signal data may then be routed directly to RF/IQ buffer 114 for temporary storage. A user input 120 may be used to input patient data, scan parameters, a change of scan mode, and the like.

In paragraph 19, please change "probe" to "transducer" as follows:

[0019] FIG. 2 illustrates an ultrasound system 70 formed in accordance with one embodiment of the present invention. The system 70 includes a ~~probe~~transducer 10 connected to a transmitter 12 and a receiver 14. The ~~probe~~transducer 10 transmits ultrasonic pulses and receives echoes from structures inside of a scanned ultrasound volume 16. Memory 20 stores ultrasound data from the receiver 14 derived from the scanned ultrasound volume 16. The volume 16 may be obtained by various techniques (e.g., 3D scanning, real-time 3D imaging, volume scanning, 2D scanning with transducers having positioning sensors, freehand scanning using a Voxel correlation technique, 2D or matrix array transducers and the like).

In paragraph 22, please change "probe" to "transducer" as follows:

[0022] FIG. 3 illustrates a real-time 4D volume 16 acquired by the system 70 of FIG 2 in accordance with one embodiment. The volume 16 includes a sector shaped cross-section with radial borders 22 and 24 diverging from one another at angle 26. The ~~probe~~ transducer 10 electronically focuses and directs ultrasound firings longitudinally to scan along adjacent scan lines in each scan plane 18 and electronically or mechanically focuses and directs ultrasound firings laterally to scan adjacent scan planes 18. Scan planes 18 obtained by the

ultrasound firings laterally to scan adjacent scan planes 18. Scan planes 18 obtained by the ~~probe~~ transducer 10, as illustrated in FIG. 2, are stored in memory 20 and are scan converted from spherical to Cartesian coordinates by the volume scan converter 42. A volume comprising multiple scan planes is output from the volume scan converter 42 and stored in the slice memory 44 as rendering box 30. The rendering box 30 in the slice memory 44 is formed from multiple adjacent image planes 34.

In paragraph 26, please change "probe" to "transducer" as follows:

[0026] FIG. 4 illustrates a B-mode image 130 having a depth 44 to one side of the display 67. Although the image being displayed is a B-mode image, a volume data set, such as volume 16 of adjacent image planes 34 (FIG. 3), has been acquired in real-time as discussed previously. A user may use the user input 120 to define a plane 132 of interest on the B-mode image 130. The plane 132 identifies a plane, such as the C-plane (i.e. anterior-to-posterior) through the volume data set having a minimum thickness of 0.1mm. Therefore, the plane 132 defines a portion, or subset, of the data set or volume 16. The plane 132 may be radial, perpendicular, or at an intermediate angle with respect to the ~~probe~~ transducer 10. Once the plane 132 has been identified, the user may rotate the plane 132 through an angle 136 with the user input 120. The user may also move the plane 132 up 138 towards the ~~probe~~ transducer 10 or down 140 away from the ~~probe~~ transducer 10.

In paragraph 28, please change reference "30" to "16" as follows:

[0028] Additionally, the user may modify a thickness 142 of the volume data set. For example, the thickness 142 may be equidistant above and below the plane 132, or the plane 132 may identify the top or bottom of the thickness 142. The thickness 142 may or may not be displayed on display 67 as lines or in numerical format (not shown). In other words, varying the thickness 142 allows the user to view image data from multiple layers of the volume ~~30~~ 16 that are parallel to the C-plane, or other plane 132, that the user has defined. The thickness 142 defined may be based on the image enhancement technique, the anatomic feature, the depth 144, and/or the acquisition type. If the user changes the position of the plane 132 after modifying the thickness 142, the size of the thickness 142 may be maintained. For example, if the user wishes to display an enhanced image 134 based on bone, a thicker thickness 142 is defined. If the user wishes to display an enhanced image 134 based on vessels, a thinner thickness 142 is defined.

In paragraph 37, please change reference "30" to "16" as follows:

[0037] For example, enhanced image 160 may use a "bone" anatomic feature

setting. With this setting, the thickness control 180 automatically defines the thickness 142, such as between 10-15 mm. The rendering setting control 190 identifies the correct technique, such as a maximum density rendering technique, and the volume rendering processor 46 processes the layers of the volume ~~30~~ 16 that are parallel to the plane 132 and within the thickness 142. Enhanced image 162 may use a "soft tissue" anatomic feature setting. With this setting, the thickness control 182 identifies the thickness 142, which may be approximately 3 mm. The rendering setting control 192 identifies the correct technique, such as an X-ray rendering technique, and the volume rendering processor 46 processes the layers of the volume 30 that are parallel to the plane 132 and within the thickness 142. The X-ray rendering technique may be used to provide an image comparable to an slice image created when using X-ray radiation. This technique may also be called average projection. Other rendering modes may be used to enhance anatomic features, such as gradient light rendering and maximum transparency. Additionally, other image processing techniques may be used to process and create enhanced images.

In paragraph 38, please change reference "30" to "16" as follows:

[0038] Similarly, enhanced images 164 and 166 may use "contrast" and "vessels" anatomic feature settings, respectively. The thickness controls 184 and 186 identify the thicknesses 142 (by way of example only, 1 mm with threshold low 0, and 5-10 mm, respectively) and the rendering setting controls 194 and 196 identify the techniques (by way of example only, surface and minimum density rendering techniques, respectively). The volume rendering processor 46 processes the layers of the volume ~~30~~ 16 that are parallel to the plane 132 and within the thicknesses 142 for each of the enhanced images 164 and 166.